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**BI-MONTHLY** 

### REPORT

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January 15, 1988

### FCC Denies Instant Novice Operation Petition

You can forget about Instant Novice operation. The FCC released an Order on December 31, 1987, denying the concept. The FCC had denied many requests over the years for immediate ham band operation by entry level amateurs.

The ruling is in response to a Petition for Rulemaking filed April 27, 1987, by Frederic G. Hambrecht, KJ4JE (Advanced) of Jamestown, Tennessee, seeking to authorize immediate operating privileges to new Novice licensees. At present, applicants must wait until the arrival of their Novice license before they can get on-the-air. The FCC acknowledged the Petition on May 20th and assigned the measure rulemaking file No. 5924. Since the FCC accepted the Hambrecht petition for public comment, many people thought it would be enacted this time.

Hambrecht suggested that the successful examinee's station could be authorized by a temporary call sign of one of the administering volunteer examiners (VE's) plus a unique numeral.

In support of his request, Hambrecht stated that the waiting time between the examination and receipt of the Novice operator license is so long that the person's recently-acquired skills are diminished. He argued that, because Novice operators would

be identifying their station's transmissions with the station call sign of one of the VE's, the FCC would have a direct means of accountability for violations without the administrative burden of maintaining a file of temporary call signs.

#### WHAT DID THE COMMENTS SAY?

Fifteen comments were filed, eleven in support and four in opposition. The opponents argued that the waiting period was not unreasonable and serves a useful purpose by giving the new Novice operator time to build a station, erect antennas and prepare for actual on-the-air operation.

Concern was expressed over the prospect of stations being identified with the VE's station call sign. William G. Welsh, W6DDB, a well-known, experienced VE, said he did not want to take the responsibility for the operating mistakes of unsupervised, inexperienced persons. Also, listeners could be faced with multiple stations being identified with the same call sign.

Toledo, Ohio amateur, Robert F. Solon, WD8LKI, said that it would be confusing even with an added identifier. The proposal was supported by those commenters who resisted any waiting period and wanted immediate operation as a reward for having successfully

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passed the Novice operator license examination.

#### RULING ON THE INSTANT NOVICE PETITION

The International Radio Regulations (Geneva, 19769) No. 2736, provide that an administration shall take such measures as it judges necessary to verify the operational and technical qualifications of any person who wishes to operate an amateur radio station.

In denying the Petition, Ralph Haller, N4RH - Chief of the FCC's Private Radio Bureau said, "...at the time the petition was filed, our applications processing facility was experiencing an unusually heavy workload. In March, 1987, Gettysburg received 6,083 applications for Novice operator licenses, compared to the average monthly receipt of 1,860 of such applications. Aparently this anomaly was caused by applicants seeking to avoid new examination requirements that are associated with the new privileges for Novice operators. As a result, there was a temporary waiting period during which the processing time exceeded our goal of 30 days. This situation has returned to normal. We now usually process amateur license applications in 18 to 21 days."

Haller said, "The present system for issuance of Novice operator licenses is a great improvement over the "mailback" system that was in effect prior to 1983. The old system was much more time-consuming because it required the telegraphy examination and the written examination to be administered at different times, and required multiple mailings between the volunteer examiner and the FCC."

"On balance, it appears that the application processing period is not unreasonable. In view of the relatively short time that it takes to process an application, the marginal benefits to be derived by authorizing successful Novice operator examinees temporary operating authority are outweighed by the disadvantages that could occur."

"Additionally, upon analysis, an instant licensing proposal appears contrary to the requirements of International Law (since

Novice operation would begin prior to FCC verification of the examinee's qualifications.) Therefore, the initiation of a rule making proceeding by the full Commission is not warranted," Haller wrote in the December Order. The fact that the proposal lacked support by the American Radio Relay League also contributed to its defeat.

Order Adopted 12/18/87, Released 12/31/87)

#### HAM RADIO AND HIGH CANCER RATE LINK

The state of Washington is still trying to connect electromagnetic fields and the incidence of cancer. The Associated Press circulated a news story on January 3rd with a Tacoma, Washington, dateline stating "Amateur radio operators in Washington and California appear to die at abnormally high rates from several forms of cancer..."

Dr. Samuel Milham, Jr., of the Washington Department of Social and Health Services studied the deaths of 2,485 Washington and California ham operators between 1979 and 1984.

He reported in the American Journal of Epidemiology that the group had a 24.1% higher incidence of leukemia, 23.6% higher rate of Lymphatic and blood-forming organ cancers ... and 15.4% more prostate cancer...

The study "indicates that amateur radio operator licensees in Washington state and California have significant excess mortality due to acute myloid leukemia, multiple, myeloma and perhaps certain types of malignant lymphoma," Milham reported.

The Electric Power Research Institute in Palo Alto, California, warned that studies like Milham's can be misinterpreted. Leonard Sagan, program manager at the institute said his research has not shown whether electricity causes cancer .. and "if it does, it's rare."

Among other newspapers, the AP release ran in the January 3rd Los Angeles Times (page 27). The headline read "Ham Radio Operators' High Cancer Rate Poses a Puzzle." The publicity certainly would not have been well received by the public in neighborhoods with Amateur Radio operators.

\_ Mag postage more 00 Test Manual: CLASSES? word-for-word OPERATOR ADIO EUR

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#### PERSONNEL CHANGES AT THE FCC ....

"Officially", the question still remains as to who will become the new FCC Special Services Division Chief replacing Ray Kowalski who left the Commission after nineteen years for a law position in the private sector.

The FCC did announce that Deputy Chief Roger Madden has become the Acting Special Services Divison Chief for the time being. We heard a rumor from outside the Commission, however, that Bob McNamara currently Chief of the Aviation and Marine Branch will become the new Special Services Chief. We tried to get this confirmed, but due to a bad storm, Washington was closed Friday.

Reportedly, Roger Madden, an engineer, was not interested in heading up the division which includes the personal, aviation and marine radio branches. Amateur Radio, of course, comes under the Personal Radio Branch. Madden's primary area of interest continues to be Land Mobile where he has an extensive background and is very active.

Bradley Holmes is in position as a new Commissioner without Senate confirmation. Susan Wing has been nominated, but is not yet in place. Reagan has asked the Senate to confirm Wing for one additional 5-year term since the unexpired term of Mimi Weyforth Dawson, whom she replaces, ends in June.

There will be many other major changes in the FCC makeup once the 1988 presidental election takes place. The FCC Chairman is appointed by the president which means that Dennis Patrick will probably have to step down. No longer is the FCC the independent agency it once was. "Politics" plays an increasingly important role in Commission activities these days.

Effective Monday, January 11, the FCC's Long Beach, California Office has been relocated to the Los Angeles area. Their new address is: Cerritos Corporate Tower, 18000 Studebaker Road - Room 660, Cerritos, CA 90701. (Tel. 213-426-4451) And it won't be long before the scattered FCC offices in Washington, DC, will be consolidated and moved. Their leases expire shortly.

- Through a large 4-column advertisement in the December 26th Fort Worth Star-Telegram, Southwestern Bell Telephone publicly thanked volunteers from the Red Cross, Salvation Army and ham operators from the Radio Amateur Civil Emergency Service (RACES) for volunteering their time and energy to set up emergency networks and patrol neighborhoods during a massive telephone service outage affecting thousands of Fort Worth residents during the holidays.
- The joint Soviet/Canadian Transpolar Ski-Trek expedition will be tracked by a sophisticated commercial search-rescue satellite teamed with Oscar-11's amateur radio satellite. The expedition team will carry two Emergency Locator Transmitters (ELT) that emit 406 MHz signals to orbiting SARSAT (Search And Rescue Satellite Aided Tracking) satellites. The tracking data will be relayed from SARSAT to UoSAT Oscar 11's digitalker which will announce the team's exact location in plain English on 2-meters. The Ski-Trek receive their location will OSCAR-11 by tuning their ham transceivers to 145.825 MHz. The expedition, which departs from Cape Arktichesky in the USSR next month, skis across the North Pole ... arriving at Canada's Cape of Columbia in May. Leonid Labutin, UA3CR, is chief radio operator for the project.
- The world's largest convention of ham radio operators, the <u>Dayton Amateur Radio Association's HamVention</u> will be held the weekend of April 29 to May 1, 1988. <u>Ron Moorefield, W8ILC</u>, advises that the <u>Awards Committee</u> is accepting nominations for:

(1.) Ham of the Year (Outstanding continuing amateur radio activity)

(2.) Special Achievement Award (One time amateur radio accomplishment.)

(3.) Technical Excellence (Technical contribution pertaining to amateur radio, past or present.)

Although not really required, special application forms are available from: Dayton Amateur Radio Association; Ron Moorefield, W8ILC, Awards Committee; P.O. Box #44, Dayton, Ohio 45401. Individuals making nominations should describe fully why the actions of the amateur recommended justifies the award. Nominations close March 15, 1988.

interest in nor am an employee of any making, preparation materials. My age to: W5YI-VEC; P.O. Box #10101; Dallas, Texas 75207. A certificate (optional) is also available not \$1.00. Detuns and accreanation materials will be sent to you within a two week period.

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why we skipped the August 1987 VE Statistics since all other months have been published. The truth of the matter is that the FCC never sent them to us. A phone call to Washington only got us another copy of the September stats with the previous August totals highlighted. We called the FCC in Gettysburg, PA, and was told that through some administrative mishandling, the August VE figures were never compiled into a report. We now understand that they will be forthcoming shortly. We do have the August VE TOTALS, but not totals by individual VEC. They are:

Mont	h/ #	ofSessions		Elements		
Year	: 1	/Es		Persons		Pass Rate
Aug.	1985	65	280	3299	4894	61.0%
Aug.	1986	75	288	3110	4555	57.1%
Aug.	1987	59	384	4081	6815	60.3%

We were also told by Larry Weikert of the FCC in Gettysburg that they have just received quantities of the new FCC Form 610. Carrying an expiration date of December 31, 1989, the new Application for Amateur Radio Station and/or Operator License is suitable for both the VE/VEC system and the Novice examining program – as well as for routine renewals and license modifications. They may be ordered from:

FCC - ATTN: Larry Weikert P.O. Box #1020 Gettysburg, Pennsylvania 17326.

or by telephone: (717) 337-1212. VE teams may order up to 200 forms but not more.

Gettysburg is also issuing amateur radio licenses in record time since they now have an additional license processing person. It is only taking about three weeks to mail a Novice license once the application is received. Add another two weeks for Technician and higher applications since they must go through the VEC Office.

#### EQUAL TIME DEPARTMENT - "NO CODE"

We continue to get comments on the petition for a "no-code" entry level license filed by: Ben B. Johnston, NY#O, of Washington, Iowa. At first, most readers seemed in favor of some form of a codeless ham license. Lately, however, we are getting many comments in opposition. The final tally is

inconclusive - about 50/50.

- Craig Dible/KB6LAK (Beverly Hills, CA, Novice instructor and full time social studies teacher) sees nothing wrong with a one-time non-renewable entry level ham license. He sent us a Los Angeles Times article about a paralyzed youth whose ham grandfather devised an infrared sensor (since patented) he calls an Opticom that transforms eye blinks into electronic Morse code tones. He is now working on a device that takes the Morse code and, with the help of a computer and voice synthesizer, decodes eye blinks into asctual spoken words for use by stroke victims and paralyzed patients.
- Tom Breidegan/N5DJG (Tucumcari, NM) says that if the code is eliminated, then the theory will soon follow. He doesn't want CB language on the ham bands.
- Michael D. Grubbs, (Pastor of the Iowa Park, Texas, First Christian Church) says "no code" will come to pass sometime, but he is opposed to it. He favors CSR code speed reduction to "preserve a part of history, but allow modern technology its place as well."
- Bob Scupp/WB5YYX, (Albuquerque, NM) suggests that possibly the 10 question code exam be incorporated as a sub-element to its written exam counterpart. "The Novice exam could become 40 questions with a passing score of 30. An applicant could fail all 10 code questions but still pass by getting more written questions correct."
- David Heller/K3TX: "Code has a place in amateur radio. It must be learned. CW gets through when other modes fail." Carolyn F. Helm/N5ITY "I feel it is very important to keep the code requirement for Novice Class; without it there is no training base for the higher class licenses." Martin E. Cughan/-KB2CJG: "Eliminating the code would open up frequencies to more people and the ham bands would become crowded, unorganized and outof-control." William J. Kenefick/W2QFE says he has been licensed 51 years and a codeless ham class "waters down" amateur radio. Richard Ociepka/K1WW "When I hear a complaint on the difficulty of code and how they can't find the time, I tell them about my wife, Norma/KR11 (Extra Class), the mother of six." (Sorry but we can't acknowledge all "no-code" letters, we have just received too many!)

We have developed a complete Novice Package that NC hable in A meters of the contain a ham ticket without I-

WOICE CLASS PACKAGE \$19.95
"I corn the Code" Cassett Tape
Novice Code Test Preparation Tape

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Technology Report, Cable Television

#### BY 1990, EVERY HOME WILL BE A THEATRE

Without a doubt, the hottest thing going these days is Cable TV. Some call it the nation's only unregulated monopoly. And there are big things in store for it. Cable TV is exactly 40 years old. It got started in 1948 by accident when a Pennsylvania appliance salesman by the name of John Walson strung 300-ohm twin lead from a mountaintop antenna to his store in the Appalachian coal-mining town of Mahanoy City. What he really wanted to do was to sell television sets, and that he did.

His customers, however, wanted the clear TV signals from Philadelphia like he showed in his store. Walson added his customers to his antenna lashup for a fee - and the nation's first cable television system was born. Back in those days it was called community antenna television (CATV) and existed primarily to provide rural viewers with higher quality broadcast channels.

Little did Walson know that one day his primitive lashup system would overtake broadcast television completely! More people now receive television over wires than overthe-air. It has been a long haul for cable television to get where it is today. The broadcast and movie industry lobby has made it difficult for them.

#### CABLE TELEVISION TAKES OFF!

At first Home Box Office was beamed from a New York skyscraper. Its range was only a hundred miles or so. In 1975, when programming could be picked off a satellite instead of from microwave or strategically placed ground-mounted antennas, cable came into it own. Every cable system installed earth stations. Today, nine satellites beam more than fifty cable channels to some 7800 systems.

In 1984, The Cable Communications Policy Act allowed cable companies to operate independent of local governments and they could charge whatever the market would bear. Subscriber rates are up about 11% over last year.

During the last three years, over 1,000 cable systems changed hands at a combined selling price of nearly \$25 billion. Prices for cable systems and broadcast television stations are determined by audience. Based on viewers, prices for television broadcast stations are coming down .... cable systems are increasing. A single cable TV subscriber now is worth more than \$2,000 when the system is sold. A cable system with 50,000 subscribers commands a selling price of \$100 million! Storer cable system sold around Christmastime for a whopping \$1.6 billion. What makes cable systems so valuable is their long range potential.

Cable TV is now available to 76% of the country and penetration now exceeds 50% of the nation. You an expect to see multiple system cable operators (MSO's) originating their own programming. Most offer FM stereo sound, VCR and second-set hookups ...some provide services to personal computers. "Cable" — as it is known, has become the electronic highway into every living room.

The initial wiring of America was by the telephone companies – and they now want to extend their services to include video delivery. The nation's telcos are calling on the FCC and Congress to drop the prohibitions that for two decades have prevented them from offering TV programming. They claim it is against the "free speech" First Amendment provisions of the Consititution. Someday it is possible – even probable – that AT&T or your local phone company will be competing with your cable system. With the development of fiber optic technology, telcos have the potential to be the dominant video delivery system to the home within ten years.

#### CABLE TELEVISION PROGRAMMING

Addressable converter box and satellite scrambling technology are part of the evolution. Cable operators can now control what you view. New video program ordering techniques are being developed. General Instrument has a new "impulse sidecar" gadget available that fits next to your converter box so you can easily order your local movie - or any of dozens of other services - by simply pressing a button.

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Remote control ordering devices are being developed. Phone companies have a new computerized automatic number identification (ANI) system that allows video program ordering by simply dialing an "800" number. Invoicing appears on your phone bill. You won't have to travel any further than your home theatre for entertainment.

More quality PPV, Pay-Per-View, services are becoming available as the number of addressable converters increases. Professional sports owners and special event promoters are closely watching the development of PPV and you can anticipate paying extra to watch major events, concerts, and professional/college teams.

The day is at hand when major sports events will be held in large studios rather than large coliseums. Cable networks are already showing NFL football games that aren't available to broadcast network television with excellent ratings.

MSO's are uniting and offering PPV services. A new one called, Home Premiere Television, the Pay-Per-View Network, (PPVN) just started operation last month. PPVN is the combined venture of five huge cable system operators.

Behind the scenes, major Hollywood studios are entering into agreements with PPV operators. PPV revenue for movie studios jumped 100% last year. You can anticipate the day when PPV will be the major source of first run Hollywood movies. Local theatres will never know what hit them!

There are other PPV systems as well. The two largest are <u>Viewer's Choice</u> and <u>Request</u> Television with a combined audience of more than 5 million homes out of 10 million presently addressable households. Cable is gearing up for the really big bucks!

Research by Paul Kagan & Associates, a media research firm, indicates today's PPV "buy rates" will increase dramatically by 1996. Viewers are now watching 61.7% "basic" cable, 26.6% PayTV (such as HBO) and only .7% Pay-Per-View. The percentages will be 70.6%, 18.5% and 10.9% by 1996.

The digital age is upon us - and with it flashy new hardware features! Waiting in the wings is a new generation of wide screen digital TV sets that can show multiple channels on a single screen, freeze frame pictures, ... even zoom in for close-ups. Viewers will be able to interact with video and with the help of sophisticated VCR's, can control programming. Digital VCR's will be able to "look ahead" and automatically reduce interference and improve the video picture.

Japan's NEC Corporation is just now launching sales of its new IDTV (improved-definition television) chips and television sets which use new digital image storage and signal processing technology to wring the best possible picture from the TV signal. The first NEC IDTV 27" set will sell for \$2,500 in Japan.

Radical improvements in TV image quality will be possible with high definition television (HDTV.) The American standard contains 525 horizontal scanning lines at 30 frames a second. HDTV contains more than twice the number of lines (1,125) and with it comes a picture every bit as good as the 35-mm film down at the local movie house. While TV broadcasters are wrestling with how to transmit HDTV, cable operators can provide the higher quality images more effectively. Broadcasting isn't going down the drain, but TV stations will be faced with major problems on how to compete for the TV audience.

Broadcast networks are looking into how they can join the wired revolution. They aren't happy that cable ad revenue passed the \$1 billion mark (up 23%) in 1987. The three major broadcast TV networks had only a 3% ad revenue increase and radio advertising was down. Newspapers and magazines continue to lose media market share.

I often wonder if John Walson and his Pennsylvania appliance store is still with us ...and what are his thoughts on what his string of three television sets evolved into. More than half the TV households in the nation (43.5 million homes according to Nielsen Media Research) are paying an average of \$300 a year for television-by-wire. I wonder what he charged?

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#### REPEATER COORDINATION DISPUTE

Lewis DePayne/KA6RBJ and Daniel Granda/KA6VHC of the 220-FCC (Frequency Coordination Commission) have filed a massive \$5 million libel and slander suit against Karl Pagel, N6BVU of Anaheim, California, the entire 220-SMA (Spectrum Management Association) frequency coordinating board, Bill Pasternak/WA6ITF and the Westlink Radio Network. Bill is also the editor of the Westlink Report, a ham radio newsletter published out of California. The suit (Case No. 541 644) was recently filed in Orange County Superior Court, Santa Ana, California.

The suit appears based on a long standing dispute as to who the legitimate 1.25 meter ham band coordinator is in Southern California. Reportedly, several years ago the existing 220-MHz coordinator, 220-SMA, refused to coordinate a repeater belonging to one Daniel Granda/KA6VHC of Whittier, California, since his repeater had been installed prior to the coordination request. Granda supposedly formed another frequency coordinating group - the 220 MHz Frequency Coordination Council - and coordinated his own repeater.

FCC rules state that the rightful coordinator is determined by amateurs eligible to install repeaters in the area and on frequencies to be coordinated. Both the 220-FCC's Granda and 220-SMA's Pagel started a campaign to determine who had the majority support of the amateur community in Southern California. It appears that they both have substantial support and evidence of this support was forwarded to the FCC in Washington.

#### MULTIPLE FREQUENCY COORDINATORS

During late December and just before leaving the FCC, Special Services Chief Ray Kowalski issued the surprising ruling that multiple frequency coordinators can indeed exist in the same geographical areas and can coordinate the same frequencies. Text of his letter:

"We have reviewed the material submitted to us on behalf of the <u>220-Spectrum</u> Management Association and also the material sumitted by the 220-Frequency Coordination Commission. The material ...submitted indicates that approximately 520 amateur operators have signed a petition declaring 220-SMA as the 1.25 meter band coordinator in Southern California. The material submitted by 220-FCC indicates that it has approximately 215 members. This showing indiates substantial support among the amateur operators in Southern California."

"Since both organizations have demonstrated substantial support it is apparent that the amateur community in Southern California recognize both as 1.25 meter band coordinators. While we did not anticipate that the local or regional amateur community would recognize two volunteer frequency coordinators with overlapping responsibilities in the same geographical area, it is not within our province to disturb such a choice."

The amateur service rules declare frequency coordinators to be an individual or organization recognized in a local or regional area by amateur operators whose stations are eligible to engage in repeater or auxilliary operation. See 47CFR Part 97.3(aa)."

"The material submitted by 220-MHz FCC and 220-SMA clearly indicates that indeed there may be two such individuals or organizations in this case."

"The existence of two recognized frequency coordinators with overlapping responsibilities in the same geographical area creates the potential for conflicting coordinations. In this circumstance it is essential that the coordinators develop a procedure to avoid incompatible amateur station repeater operation."

"We strongly urge that the 220-SMA and 220-FCC work out such a procedure. There is already one apparent current conflict involving the repeater operation of amateur station KA6VHC and KA6WFG. Additional conflicts will result unless a procedure is developed to avoid inconsistent coordination."

"If inconsistent cordinations lead to mutual interference between amateur stations in repeater operation, then the licensees of

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both stations will be held equally responsible under §97.85(g) of the FCC rules for resolving that interference. If the interference in such a circumstance is not resolved, the result may be violation notices and/or monetary forfeitures for violation of §97.78 (requiring good amateur practice), §97.85(g) (holding both coordinated stations equally responsible for resolving interference) and/or §97.125 (stations are prohibited from causing willful/malicious interference) of the FCC rules."

"In such a circumstance, the violation notices or monetary forfeitures could be directed against the licensees of the stations in repeater operation, as well as against licensees of stations that originate transmissions that are repeated. Thus it is incumbent upon frequency coordinators to take steps to preclude the possibility of inconsistent frequency coordination." The letter is signed by: Raymond A. Kowalski, Chief, Special Services Division.

The Kowalski ruling appears to permit individuals to form their own frequency coordinating organization as long as they have the substantial (but not necessarily, majority) support of other amateurs eligible to put repeaters on the air. If interference results, then the repeater owners must resolve the dispute and users of these repeaters as well as the repeater owners are subject to FCC sanctions. This could open the door for more problems for the Amateur Radio Service.

- export of high tech equipment which could have military implications, Asian clone makers are prohibited from exporting computers to iron curtain countries. The prohibition doesn't extend to private citizens, however, and Polish citizens are purchasing PC's from Taiwanese companies and then reselling them at huge profits to their own government. The United States is very concerned and is monitoring the situation.
- American Airlines has a new service called "Capture" that allows large corporations to monitor what its executives are booking in the way of airline flights. Programmed into "Capture's" software is the company's travel policy. Eventually the service will be

extended to include hotels, rental cars ...and the like. Travel booking information is transmitted directly to corporate headquarters.

- Federal authorities intentionally jammed two-way radio transmissions from Cuban inmates holding 90 hostages at the Atlanta prison last month so that they would not have access to the news media. The radios were taken from guards during the revolt.
- "Made in USA" should be a warning label, says Lester C. Thurow, dean of the School of Management at the Massachusetts Institute of Technology. It often means poor productivity, bad quality, high cost, poor workmanship, excessive defects and resistance to innovation. The research was reported in the journal of the Association for the Advancement of Science.
- "Business Month" has named Compaq Computer as one of the nation's five best managed companies for 1987. Compaq designs and manufactures desk-top IBM compatibles. Only five years old, the firm racked up \$1 billion in sales and \$141 million in profits last year. A blue ribbon panel picked the winners. Apple Computer was named a runner up with earnings of \$217 million on \$2.7 billion in revenues.
- The U.S. Department of Defense and Congress' Office of Technology Assessment is concerned that the U.S. news media could band together and launch satellites with high resolution imaging capabilities that could present national security and foreign policy problems by photographing military operations and other "sensitive" information from space. Preventing satellite news gathering could result in First Amendment "Freedom of the Press" challenges. Even if the U.S. bans remote sensing satellites, other nations will have the capability within a decade says an OTA report.
- Microcomputer technology constantly changes. First it was CP/M, then MS-DOS now the single-user personal computer standard seems headed toward OS/2 IBM's proprietary operating system of the future which supposedly can't be cloned. But MS-DOS won't go quietly. It is, by far, the largest single

installed operating system in PC's today. You can expect MS-DOS to be around for years to come and that "bridges" will be built between MS-DOS and OS/2 architecture. Biggest problem with MS-DOS is the 640K memory capacity. OS/2 can handle 5M bytes of RAM.

- Computer maker, Atari Corporation has bought the 67-store Federated consumerelectronics stores for \$67 million. Federated, which was having financial problems, sells two-thirds of Atari's PC's. And speaking of Atari, they will shortly introduce a new desktop publishing system for under \$5,000 - complete with computer hardware, software and laser printer.
- The 1987 National Work at Home Survey estimates that 23.3 million Americans work at home and some 70% of those responding said owning a PC enabled them to set up shop at home. The average home office system cost \$2,100. Other important communications tools for the work-at-home set included modems, home fax machines and cellular telephones.
- ABC plans to use 500 microphones at the 1988 Winter Olympic Games to be held in Calgary, Alberta, between February 13 and 28. As many as 120 mikes will be used on the ski trails alone to capture the slushing sounds. Stereo sound will be used to get the sensation of speed. Video cameras will be mounted on ski jumpers helmets and bobsleds.
- Toshiba will introduce home 3-dimension video camcorders this Spring with a price tag of \$2,200. The new two lens device records two pictures on one videocassette tape which is placed inside a special adapter for playback on a conventional VCR and TV. 3-D glasses are required for viewing.
- An electronic satellite-delivered service called "The Sports Page" allows users to get instant reports on professional/college sports and horse racing - including Las Vegas odds. Service appears aimed at professional gamblers and/or bookies. Alpha-numeric oneline LCD readout appears on pager which is accessed by keypad. Cost: \$45 month from a Las Vegas outfit. (\$55 if regular paging service is included.)

- Laser cards are small plastic "credit" cards that store information as tiny black dots burned into the surface by a laser in a special computer terminal. They have the capability to store 4 million characters - about a hundred times more than microchip-based "smart" cards. They could be used to store vast information such as personal medical records and product technical manuals.
- A special amateur radio reciprocal licensing and third-party traffic agreement between Canada and the Soviet Union has been signed that will allow amateur radio to become the principal means of communication for the joint Canada-Soviet Transpolar Ski-Trek. The agreement will remain in effect until the conclusion of the expedition.
- The recently concluded Mobile Administrative Radio Conference laid the groundwork for many developing nations to have telephone service for the first time in remote parts of the world by accessing overhead satellites. In many "third world" countries, there are fewer than 10 telephones per hundred people ... compared to 90 telephones per hundred in the United States.
- The United States was mostly satisfied with the results of the five week conference - specially concerning the implementation of a new maritime distress system. Currently ships at sea keep continuous radio watch on the international distress frequencies and render assistance in case of emergency. The new automated satellite distress system will allow search and rescue teams on shore to be automatically alerted to a distress incident. The conference also rearranged the HF bands used by the Maritime Services to provide for more narrow-band and digital channels and less for the more traditional maritime uses such as Morse Code.
- The conference yielded to the Maritime Unions that, in the interest of preserving jobs, wanted to continue the practice of mandating a full time radio operator aboard seagoing vessels. The United States is not bound by the agreement, however, since it "reserved its position" saying it would determine for itself whether on not a professional radio operator is needed on all of its ships.

\$3.00 plus postage \$3.0 plus tag 50¢ each manual.

S Advanced E: Cla pppd) PLUS Postage

SAME DAY SHIPPING: multiple-choice answer and tells you which answer is be complete Morse Code Course: 0-21 w.p.m.=\$29.95, pl

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January 15, 1988

- e Entronics, a Dallas firm, has developed a computerized device that <u>cuts money order processing time to just 5 seconds!</u> After selling many convenience store chains, they now expect a big contract from the U.S. Postal Service. Another machine automates the processing of cashier's checks by banks. A new machine to be introduced later on this year will speed up airline passenger boarding.
- The Personal Communications Section of the EIA (Electronic Industries Association) has filed a Petition for Reconsideration requesting that the FCC not institute proposed changes to the cordless telephone 46/49 Mhz channelization scheme. The EIA says that removal of center frequency standards, while fostering spectrum efficiency and development of narrowband products, would have the undersireable side effect of increased interference and possible malfunction of existing cordless telephones. Petition filed: January 6, 1988.
- The FCC released a December 30th Public Notice advising new applicants for transmitting earth stations that they must include a statement with their application that they are in compliance with the FCC's environmental radiation health standards.
- Regency Electronics, Inc., a familiar name to the radio hobbyist, is going out of the consumer electronics business, (apparently because they didn't do too well in it although that's not exactly what their press release said.) Their president and CEO, Joseph E. Boone, has resigned and Regency intends to sell off its line of scanners, information radio products and marine radios. Boone will serve as a consultant to seek a buyer for the consumer products division. Regency will continue in the land mobile, utility load management and mobile telephone business. Last year, consumer radio products only accounted for 24% of Regency's sales.
- We mentioned in our last issue the petition filed by Goldberg & Spector, attorneys for TV Answer, Inc., of McLean, Virginia. TV Answer seeks a spectrum allocation of 500 KHz from the 216-222 MHz Maritime/Amateur bands to implement a return radio circuit from TV viewers to cable operators or

TV broadcast stations using a hand-held remote control device. The FCC has accepted TV Answer's petition and has assigned it Rulemaking file No. of 6196. Comments close on January 28, 1988. The device will allow consumers to easily order pay-per-view TV programming and participate in nationwide opinion sampling and polls.

#### SATELLITE NETWORK FOR 18-WHEELERS

Omninet Communications has filed an application with the FCC seeking authorization to run a novel commercial data communications and position location system utilizing existing orbiting satellites operating in the 12/14 GHz video broadcasting bands.

According to Omninet, the proposed network - legal under ITU Region 2 rules since mobile/fixed satellite operation is authorized in addition to DBS (direct broadcast satellites) - would consist of over 20,000 mobile or transportable transmit/receive earth stations - each of which would employ 30" parabolic antennas to receive and send data from vehicles or "customer stationary locations."

The "customers" would be primarily in the trucking industry who would be able to communicate with (via alpha/numeric keyboards and readouts) and track locations of large trucks operating throughout the nation.

The FCC has established two commercial services in order to answer this need, the MSS (Mobile Satellite Service) and the Radio Determination Satellite Service (RDSS), but neither is yet in full commercial operation. The Omninet proposal is completely independent of the frequency bands that the FCC set aside specifically for this purpose.

To reduce the potential for interference to video DBS (Direct Broadcast Satellite) transmissions, Omninet is proposing, at least at first, to operate with a frequency-hopped spread spectrum modulation scheme. Omninet requested a blanket license for its small dish antennas as well as an authorization for its hub station which will utilize a 7.6 meter dish. Comments on the Omninet proposal close on February 5, 1988.